

Amendment

Response to Office Action dated December 5, 2008

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An [[A]]axial pseudo-isothermal chemical reactor (1), comprising a substantially cylindrical shell (2), with defining a vertical axis (A-A), closed at the opposite ends by upper (4) and lower (3) bottoms respectively, a reaction zone (8), defined in said shell (2) and in which a catalytic bed (11) and a plurality of flat, boxed, plate-shaped heat exchangers (12) are supported,

wherein all of the heat exchangers supported in said reaction zone are identical, flat, boxed, plate-shaped heat exchangers, having the shape of a parallelepiped and having vertical long sides, (20) and short sides (21) extending parallel to a same diameter (B) of the shell (2), are supported, characterized in that said exchangers (12) are all identical

and in that their short wherein the vertical long sides (21) of the heat exchangers are have the ends arranged on imaginary cylindrical surfaces (22,23, 24,25, 26,27) having the same radius as the inner radius of the shell (2) and having centers all arranged on a along said same diameter (B) of the shell (2),

wherein at least two of said exchangers (12) are arranged on a same imaginary cylindrical surface of said imaginary cylindrical surfaces (22, 23, 24, 25, 26, 27), said plurality of heat exchangers (12) centrally defining an axial manhole passage (19).

2. (Currently amended) The [[C]]chemical reactor according to claim 1, characterized in that wherein said exchangers (12) are arranged on equally spaced parallel planes.